

Factor by grouping.

1. $x^2 - ax + bx - ab$
2. $br + b + cr + c$
3. $2ms + 3mt - 4ns - 6nt$
4. $3cx - bx + 3cy - by$
5. $f^2 + 2fg + mf + mg + g^2$
6. $4r^2 - 12rs - 6s + 4r + 9s^2$
7. $a^2 - 4ab + 4b^2 - a + 2b$
8. $t^2 - s^2 + rs - rt$
9. $a^3 + b^3 + a^2 - b^2$
10. $a^3 + b^2 - b^3 - a^2$
11. $p^3 - 4q^2 + p^2 - 8q^3$
12. $w^3 + 27z^3 - w^2 + 9z^2$
13. $25x^2 - 10x + 1 - 4y^2$
14. $x^2 + 2xy + y^2 - 4z^2$
15. $a^2 + 4b^2 - 25c^2 + 4ab$
16. $x^3 + x^2 - 4x - 4$